1. B
2. C (Note: You do not need to know molecular formulas. But you should know the notation for some of the common fatty acids, including arachidonate. Since you know that it’s 20:4, the chain has 20 carbons, not 18).
3. A
4. B
5. D
6. A
7. A (New skeleton every 12-15 years, definitely more than four in 100 years).
8. D
9. E
10. E
11. E
12. D
13. E (These are skeletal—not smooth—muscle fibers).
14. B
15. D
16. E
17. A (See reaction in Lipids 2 lecture. 14 NADPH required total, palmitate is 16:0 so 8 acetyl units required to make it. Transport of each acetyl-CoA yields one NADPH, so 8 NADPH total. Need 6 more, all of which come from PPP).
18. D
19. C
20. A (Note: Answer C is incorrect because while it’s true that all bone growth is appositional, the epiphyseal plate is actually cartilage—it increases the length of long bone by interstitial growth).
21. B
22. C
23. C
24. A
25. B
26. B
27. E
28. C
29. B
30. C
31. B
32. D
33. D
34. E
35. E (In fact, there is no extensor in the ankle joint).
36. A
37. E
38. C